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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,909	01/10/2001	Steven W. Arms	1024-035	8315

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JAMES MARC LEAS
37 BUTLER DRIVE
S. BURLINGTON, VT 05403

EXAMINER

TRINH, MINH N

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 11/01/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

S.M.

Office Action Summary

Application No.

09/757,909

Applicant(s)

ARMS ET AL.

Examiner

Minh Trinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 and 72-101 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 22-27, 72-74, 100 and 101 is/are rejected.
- 7) ☒ Claim(s) 11-21 and 75-99 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed in paper No. 6 (dated 9/11/2002) has been fully considered and made of record. Claims 1-32 and 72-101 are now pending in this application. Claims 33-71 have been canceled.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 4-10, 23-27, 72-73 and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable Bernstein (US 4,759,120) in view of J. F. Bell (US 3,196,523).

As applied to claims 1 and 4-10, Bernstein teaches the method of electrical device comprising: providing a coil of conductor and an insulation which having a coil outer surface, the insulation on the coil outer surface (as discussed in the abstract, lines 1-20); forming openings on the outer surface to expose the conductor 23(col. 3, lines 65-68). Bernstein does not teach the step of: "dicing through the coil to provide a plurality of short coils. J. F. Bell teaches the above such as "dicing through the coil to provide a plurality of short coils" (see col. 4, lines 35-38, and lines 69-73). Therefore, it would have been an obvious to one having skill in the art to modify the method invention of Bernstein as to employ the teaching of severing or dicing the long coil into a number of short coils as taught by J. F. Bell in order to obtain a plurality of coil turns with a desired size, shape and configurations. Noted that the "severing" of Bell is readable as

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"dicing" of the present invention. Furthermore, applicants are also referred to a cited reference to Shikama et al (US 6,189,204), that Figs. 2, 7 shows cutting lines A-A, B-B.

As applied to claim 4, refer to discussion in claim 1 above. Further, Bernstein teaches the substrate¹⁵ and mounting the coil thereof (as shown in Fig. 3).

As applied to each of claims 5-10, as relied upon discussion in claims 1 and 4 above.

As applied to claims 23-25, Bernstein teach that the openings is being formed by laser (col. 1, lines 60-65, col. 2, lines 65-68, etc).

As applied to claim 26, Bernstein does not teach ablating the ring shaped opening in the insulation. With respect to the above, it would have been an obvious matter of design choice to choose any desired shape of the opening since applicant has not disclosed that the "ring shaped "as cited in claim 26 would solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the configuration as taught by the applied art. Moreover, it would have been an obvious matter of design choice to make the different portions of the opening of whatever form or shape was desired or expedient. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47.

As applied to claim 27, Bernstein does not teach that the insulation is polyimide. It would have been an obvious matter of design choice to choose any desired insulation material since applicant has not disclosed that the "insulation is polyimide"as cited in claim 27 would solve any stated problem or is for any particular purpose and it appears

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that the invention would perform equally well with the insulation material as taught by the applied art.

As applied to claim 72, Bernstein teaches the openings is being formed by abrading (col. 1, lines 60-65, col. 6, lines 34-36).

As applied to claim 73, Bernstein teaches the openings is being formed by chemical etching (col. 1, lines 60-65, col. 6, lines 46-47).

As applied to claim 101, Bernstein does not teach the laser comprises excimer laser. It would have been an obvious to choose any desired laser process to remove insulation material since applicant has not disclosed that the "laser is excimer laser" as cited in claim 101 would solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the conventional laser as taught by the applied art.

4. Claims 74, 2, 3 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable Bernstein (US 4,759,120) in view of J. F. Bell (US 3,196,523).

As applied to claim 74, Bernstein does not teach the recites: "providing a coil of conductor and insulation on a tube.

As applied to each of claim 2, 3 and 100, refer to above discussion of claim 74.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable Bernstein in view of J. F. Bell as applied above and further in view of Shikama et al (US 6,189,204).

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As applied to claim 22 Bernstein or J. F. Bell as applied and relied upon above claim 1 does not teach the coil is in hermetically sealing the housing. Shikama et al teach such that above (see related figure 6 that coil 5 is being sealed in the housing). Therefore, it would have been an obvious to one having skill in the art to employ the teaching of the coil is in hermetically sealing the housing as taught by Shikama et al onto the method invention Bernstein /J. F. Bell in order to obtain a desired coil structure within its housing thereof.

Allowable Subject Matter

6. Claims 11-21, 28-32 and 75-99 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Interviews After Final

8. Applicants note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing). Such an interview may be granted if the examiner is convinced that disposal or clarification for appeal may be accomplished with

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only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations which would require more than nominal reconsideration or new search will be denied. See MPEP 714.13 and 713.09.

Prior Art References

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art references are cited for their teaching of method of fabricating a discrete coil device.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887.

The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7307 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

mt
October 25, 2002

A handwritten signature in dark ink, appearing to be 'Peter Vo', written over a horizontal line.

**PETER VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700**